

US-PAT-NO: 5530474

DOCUMENT-IDENTIFIER: US 5530474 A

TITLE: White balance correction device with correction signal limiting device

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Claims Text - CLTX (21):

wherein said calculation means limits a variable range of said white balance control signal formed from said color temperature information, according to the state of said iris.

Details Text Image HTML KWIC

281 US 5543835 A

282 US 5532742 A

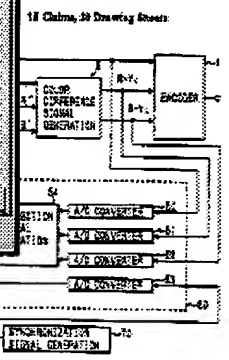
283 US 5530474 A

284 US 5528373 A

Patent Number: 5,530,474  
Date of Patent: Jun. 25, 1996  
6/25/02

OTHER PUBLICATIONS  
U.S. Pat. No. 5,530,474, issued Jun. 25, 1996.  
U.S. Pat. No. 5,530,474, issued Jun. 25, 1996.

ABSTRACT  
The present invention relates to a white balance correction device and method for correcting color temperature information according to the state of the iris and forming a color control signal to the color temperature information, and the use of the color control signal to set an area of overlapping pixel areas, whereby the color of the white balance is rendered visually.



US-PAT-NO: 5325185

DOCUMENT-IDENTIFIER: US 5325185 A

**TITLE:** Apparatus and method for adjusting white balance of a video camera

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**Detailed Description Text - DETX (4):**

The position data is used by the microprocessor 12 to represent how much light can pass through the iris 2. As position sensor 11, a hall effect device may be used, for example. Other position sensing mechanisms may equally well be used. Twelve is a microprocessor for calculating the most suitable white balance control data in accordance with the output of the signal level detector and the position data of the iris 2.

**Detailed Description Text - DETX (22):**

Sensor 11 sends position information of iris 2 to microprocessor 12. Microprocessor 12 calculates the optimum white balance data according to the

5325185A  
Patent Number: 5,325,185  
Date of Patent: Jan. 28, 1994

1/1989 Nakamura et al. 531/219  
2/1989 Kawada et al. 531/423  
1/1990 Kurokawa et al. 531/471  
1/1991 Kurokawa et al. 531/471  
1/1991 Kurokawa et al. 531/471  
1/1991 Kurokawa et al. 531/471  
1/1991 Kurokawa et al. 531/471  
1/1991 Kurokawa et al. 531/471

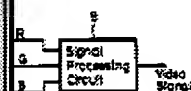
**OTHER PUBLICATIONS**

"Reference", Part V, Compendium '89, JET,  
Tokyo, Japan  
1989—Takeshi I. Ohashi  
1989—Shiroshi Nishida  
1989—Shiroshi Nishida, Jerry A.

**ABSTRACT**

An adjustment circuit in which red, green and blue representative of a video image are input to a signal level detector. A sensor senses the level of the red, green and blue and a second detector senses the level of the video image. A controller calculates the optimum white balance data according to the output of the signal level detector and the position data of the iris 2.

1 Color, 2 Drawing Sheet



Details Text Image HTML KWIC

304 US 5331154 A

305 US 5329361 A

306 US 5325185 A

307 US 5321515 A

Controller



EAST Browser - L17: (564) 15 with [zoo... | JP 03003591 A | Tag: S | Doc: 457/564 | Format: KWIC

File Edit View Tools Window Help

**PAT-NO:** JP403003591A

**DOCUMENT-IDENTIFIER:** JP 03003591 A

**TITLE:** WHITE BALANCE CONTROLLER

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**Abstract Text - FPAR (1):**  
**PURPOSE:** To reduce malfunction of white balance correction by providing a detection means detecting zoom position of a camera lens and controlling the output of a color signal gain control signal in response to the signal level.

特許庁 特許出願公開  
 (A) 平3-3591  
 特許庁 平成3年(1991)1月25日  
 特許庁 特許出願の公表 (金+費)

特許第1000号 地下電線埋設株式会社  
 特許第1000号 地下電線埋設株式会社  
 特許第1000号

特許  
 本発明は、カラービデオカメラのズーム位置を検出する手段と、検出されたズーム位置に基づいて色信号の利得を制御する手段とを具備することを特徴とする。本発明は、ズーム位置を検出する手段として、ズーム位置検出手段と、ズーム位置検出手段の検出結果に基づいて色信号の利得を制御する手段とを具備することを特徴とする。本発明は、ズーム位置を検出する手段として、ズーム位置検出手段と、ズーム位置検出手段の検出結果に基づいて色信号の利得を制御する手段とを具備することを特徴とする。

455	JP 03030576 A	
456	JP 03024869 A	
457	JP 03003591 A	
458	JP 02210974 A	

本発明は、ズーム位置を検出する手段と、検出されたズーム位置に基づいて色信号の利得を制御する手段とを具備することを特徴とする。本発明は、ズーム位置を検出する手段として、ズーム位置検出手段と、ズーム位置検出手段の検出結果に基づいて色信号の利得を制御する手段とを具備することを特徴とする。

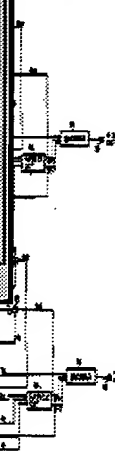
本発明は、ズーム位置を検出する手段と、検出されたズーム位置に基づいて色信号の利得を制御する手段とを具備することを特徴とする。本発明は、ズーム位置を検出する手段として、ズーム位置検出手段と、ズーム位置検出手段の検出結果に基づいて色信号の利得を制御する手段とを具備することを特徴とする。

-752-

do Detail

**control means for controlling the white balance of outputs of said image sensing means by varying a combination of said first and second control signals in accordance with the variable magnification of zoom in said zoom optical system.**

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**344** **US 5018017 A**

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**Abstract Text - FPAR (1):**

**PURPOSE:** To appropriately correct a white balance in spite of the ratio of zoom by controlling the white balance based on output information from an image pickup element, detection information of a color temperature detection means and detection information of a zoom ratio detection means.

**Abstract Text - FPAR (2):**

**CONSTITUTION:** The color temperature detection means 6 detecting color temperature information on incident light from a subject, the zoom ratio detection means 12 detecting the ratio of the zoom of a zoom lens and a white balance control circuit 13 controlling the white balance based on output information from the image pickup element 1, detection information of the color temperature detection means 6 and detection information of the zoom ratio detection means 12 are provided. The white balance control circuit 13 changes the control signal of the white balance by zoom ratio information from a zoom encoder 12 and outputs it to amplifiers 3a and 3b for white balance control. Thus, the white balance can appropriately be corrected by a stable operation in spite of the ratio of the zoom.

Details Text Image HTML KWIC

439 JP 04213289 A

440 JP 04196981 A

441 JP 04170887 A

442 JP 04068991 A

同装置でホワイトバランスを調整するホワイトバランス調整部とを備えたことを特徴とするカメラシステムに関する。

(1) 装置は、カメラシステム調整部、色温度検出部、ズーム検出部、およびズーム比検出部を備える。色温度検出部は、被写体からの色温度を検出する。ズーム検出部は、ズームレンズのズーム比を検出する。ズーム比検出部は、ズームレンズのズーム比を検出する。ズーム比検出部は、ズームレンズのズーム比を検出する。

とを備え、装置は、カメラシステム調整部、色温度検出部、ズーム検出部、およびズーム比検出部を備える。色温度検出部は、被写体からの色温度を検出する。ズーム検出部は、ズームレンズのズーム比を検出する。ズーム比検出部は、ズームレンズのズーム比を検出する。ズーム比検出部は、ズームレンズのズーム比を検出する。

No Detail

US-PAT-NO: 5283632

DOCUMENT-IDENTIFIER: US 5283632 A

\*\*See image for Certificate of Correction\*\*

TITLE: Image pickup apparatus

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## Brief Summary Text - BSTX (25):

When information from the optical system is constituted by information of a focal distance (length) from the image pickup optical system, a synthesis ratio of the control signals from both the white balance adjusting means is set variable in accordance with the focal distance information from the image pickup optical system to obtain a single control signal, thereby performing white balance adjustment.

## Brief Summary Text - BSTX (26):

In addition, when information from the optical system is constituted by information from the distance measuring means for measuring the distance



US 5283632 A

Patent Number: 5,283,632

Date of Patent: Feb. 3, 1994

1/1987 Kato et al. 55/25 C  
 1/1988 Moore et al. 55/24 C  
 1/1989 Hoshi 55/23 C  
 5/1989 Tanaka et al. 55/21 C  
 1/1990 Tanaka et al. 55/20 C

## EPOCH PATENT DOCUMENTS

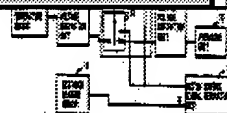
1/1987 European Pat. Off. 55/24 C  
 5/1988 Japan 55/21 C

Inventor—James J. Choudry  
 Attorney—Michael R. Lee  
 et al. Firm—Roth, Macken, Daley &

## ABSTRACT

Image apparatus includes a first white balancing circuit for generating a control signal for a adjustment by using a signal output from a first element, a second white balance adjustment circuit for generating a control signal for white balance by using a signal output from a second element, and a synthesizing circuit for generating a variable synthesis ratio of the signals from the two white balance adjusting circuits with information from an optical

17 Claims, 29 Drawing Sheets



314 US 5293225 A

315 US 5291298 A

316 US 5283632 A

317 US 5270802 A

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